Federal Communications Commission 445 12<sup>th</sup> St., SW Washington, DC, 20554

News Media Information 202 / 418-0500 Fax-On-Demand 202 / 418-2830 TTY 202 / 418-2555 Internet: http://www.fcc.gov

> DA 02-899 April 19, 2002

## **MM DOCKET NO. 99-325**

## COMMENT SOUGHT ON NATIONAL RADIO SYSTEMS COMMITTEE DAB SUBCOMMITTEE'S "EVALUATION OF THE IBIQUITY DIGITAL CORPORATION IBOC SYSTEM"

Comment Date: June 18, 2002 Reply Comment Date: July 18, 2002

On November 1, 1999, the Commission issued a Notice of Proposed Rule Making (NPRM) entitled *Digital Audio Broadcasting Systems and Their Impact on the Terrestrial Broadcast Service*, 15 FCC Rcd 1722 (1999). In the NPRM, the Commission stated its policy goals for a new terrestrial digital audio broadcasting (DAB) service, and sought comment on terrestrial in-band, on-channel (IBOC) AM and FM DAB systems and AM and FM DAB systems based on the allocation of new radio spectrum in different frequency bands. The Commission also stated in the NPRM its belief that it is necessary and appropriate to rely to some degree on the expertise of the private sector for DAB system evaluations, and listed the following 10 tentative selection criteria for DAB systems: 1) enhanced audio fidelity; 2) robustness to interference and other signal impairments; 3) compatibility with existing analog service; 4) spectrum efficiency; 5) flexibility; 6) auxiliary capability; 7) extensibility; 8) accommodation for existing broadcasters; 9) coverage; and 10) implementation costs/affordability of equipment.

On April 15, 2002, iBiquity submitted its AM IBOC test results to the Commission. On April 16, 2002, the National Radio Systems Committee (NRSC), sponsored by the National Association of Broadcasters and the Consumer Electronics Association, submitted a report from the Evaluation Working Group of the DAB Subcommittee entitled *Evaluation of the iBiquity Digital Corporation (iBiquity) IBOC System, Part 2 – AM IBOC.* This is the only terrestrial DAB system currently under consideration by the Commission. The NRSC report evaluates the laboratory and field testing of the iBiquity hybrid mode<sup>2</sup> AM IBOC DAB system, and contains conclusions and recommendations concerning this AM IBOC DAB system to the Commission. Both the NRSC and iBiquity filings are available electronically at <a href="http://www.fcc.gov/e-file/ecfs.html">http://www.fcc.gov/e-file/ecfs.html</a> under MM Docket No. 99-325, or from the Commission's duplicating contractor, Qualex International, 445 12<sup>th</sup> Street, SW, Room CY-B402, Washington, DC, 20554, 202-863-2893.

<sup>&</sup>lt;sup>1</sup> The NPRM is available electronically at <a href="http://www.fcc.gov/e-file/ecfs.html">http://www.fcc.gov/e-file/ecfs.html</a> under MM Docket No. 99-325.

<sup>&</sup>lt;sup>2</sup> During AM hybrid mode operations, broadcasters simultaneously transmit analog and digital signals within their authorized emission masks.

By this Public Notice, comment is sought on the NRSC report, conclusions, and recommendations concerning the iBiquity hybrid mode AM IBOC DAB system, as well as on the iBiquity AM IBOC test results, with respect to the Commission's stated DAB policy goals and selection criteria. Pursuant to Sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on or before June 18, 2002, and reply comments on or before July 18, 2002. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies. See Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24121 (1998).

Comments filed through the ECFS can be sent as an electronic file via the Internet to http://www.fcc.gov/e-file/ecfs.html. Generally, only one copy of an electronic submission must be filed. If multiple docket or rulemaking numbers appear in the caption of this proceeding, however, commenters must transmit one electronic copy of the comments to each docket or rulemaking number referenced in the caption. In completing the transmittal screen, commenters should include their full name, U.S. Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form <your e-mail address>." A sample form and directions will be sent in reply. Parties who choose to file by paper must file an original and four copies of each filing. If more than one docket or rulemaking number appear in the caption of this proceeding, commenters must submit two additional copies for each additional docket or rulemaking number. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). The Commission's contractor, Vistronix, Inc., will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, NE, Suite 110, Washington, DC, 20002. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building. Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD, 20743. U.S. Postal Service first-class mail, Express Mail, and Priority Mail should be addressed to 445 12th Street, SW, Washington, DC, 20554. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

In addition to the AM IBOC test results now on file, some additional testing is required. The iBiquity AM IBOC tests evaluated by NRSC were conducted using MPEG-2AAC perceptual audio coding. iBiquity reportedly intends to use proprietary audio coding based on PAC, developed by Lucent Technologies, in its final AM IBOC DAB system, and will provide, in the near future, a report for evaluation containing test data for its AM IBOC DAB system using this audio coding. Also, the iBiquity AM IBOC tests considered only AM daytime (groundwave) propagation conditions. Additional testing of the iBiquity AM IBOC system is required to assess AM nighttime (skywave) propagation conditions. Further public comment will be solicited when the results of the additional testing are submitted to the Commission.

Ex parte status: This is a "permit-but-disclose" rule making proceeding. See Digital Audio Broadcasting Systems and Their Impact on the Terrestrial Broadcast Service, 15 FCC Rcd at 1745 (1999). "Permit-but-disclose" ex parte procedures permit interested parties to make ex parte presentations to the Commissioners and Commission employees and require that these presentations be disclosed in the record of the relevant proceeding. Persons making a written ex parte presentation to the Commissioners or Commission employees must file the written presentation with the Commission, as set forth below, no later than the next business day after the presentation. See 47 C.F.R. §1.1206(b)(1). Persons making oral ex parte presentations must file a summary of the presentation, as set forth below, and deliver copies to the Commissioners or Commission employees involved with the presentation no later than the next business day after the presentation. See 47 C.F.R. §1.1206(b)(2). All ex parte filings must be clearly labeled as such and must reference this Public Notice, as well as any other applicable docket or file numbers.

An original and one copy of all *ex parte* memoranda must be filed with the Commission's Secretary, at 236 Massachusetts Avenue, NE, Suite 110, Washington, DC, 20002, in accordance with 47 C.F.R. § 1.1206(b)(1). In addition, one copy of each *ex parte* memorandum should be delivered to each of the following locations: (1) the Commission's duplicating contractor, Qualex International, 445 12<sup>th</sup> Street, SW, Room CY-B402, Washington, DC, 20554, 202-863-2893; and (2) Peter H. Doyle, Media Bureau, 445 12<sup>th</sup> Street, SW, Room 2-B450, Washington, DC, 20554. Copies of the reports and any subsequently filed documents in this matter may be obtained electronically at <a href="http://www.fcc.gov/e-file/ecfs.html">http://www.fcc.gov/e-file/ecfs.html</a>, and on paper from Qualex International. The reports and all subsequently filed documents also will be available for public inspection and copying during normal business hours in the Commission's Reference Information Center located at 445 12<sup>th</sup> Street, SW, Room CY-A257, Washington, DC, 20554.

-FCC-

Media Bureau contacts:

Peter H. Doyle (pdoyle@fcc.gov) 202-418-2700 Edward P. De La Hunt (edelahun@fcc.gov) 202-418-2700 Keith A. Larson (klarson@fcc.gov) 202-418-2600 Kim Matthews (kmatthew@fcc.gov) 202-418-2120